



INSTALLATION MANUAL

Exterior Aluminum Entrance Doors

Door unit, transom (sidelite) installation and hinge adjustment — single and double doors 80"–96"

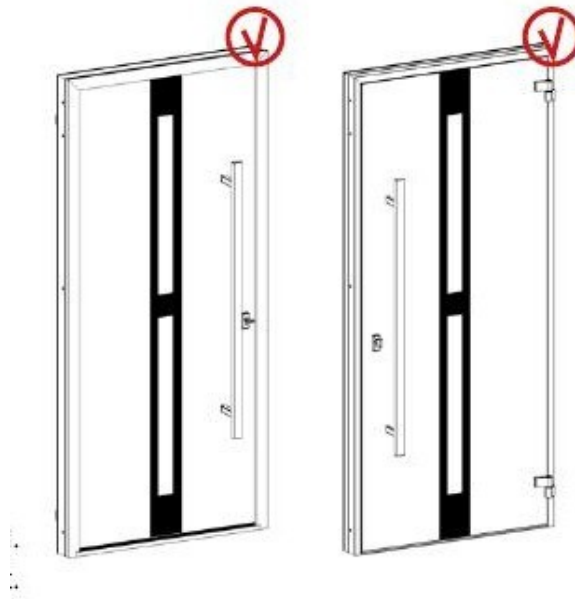
Optional add-ons covered in this manual:

- Smart lock with factory precut
- Exterior / interior trims (capitals)
- Flat frame extension

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Before You Begin

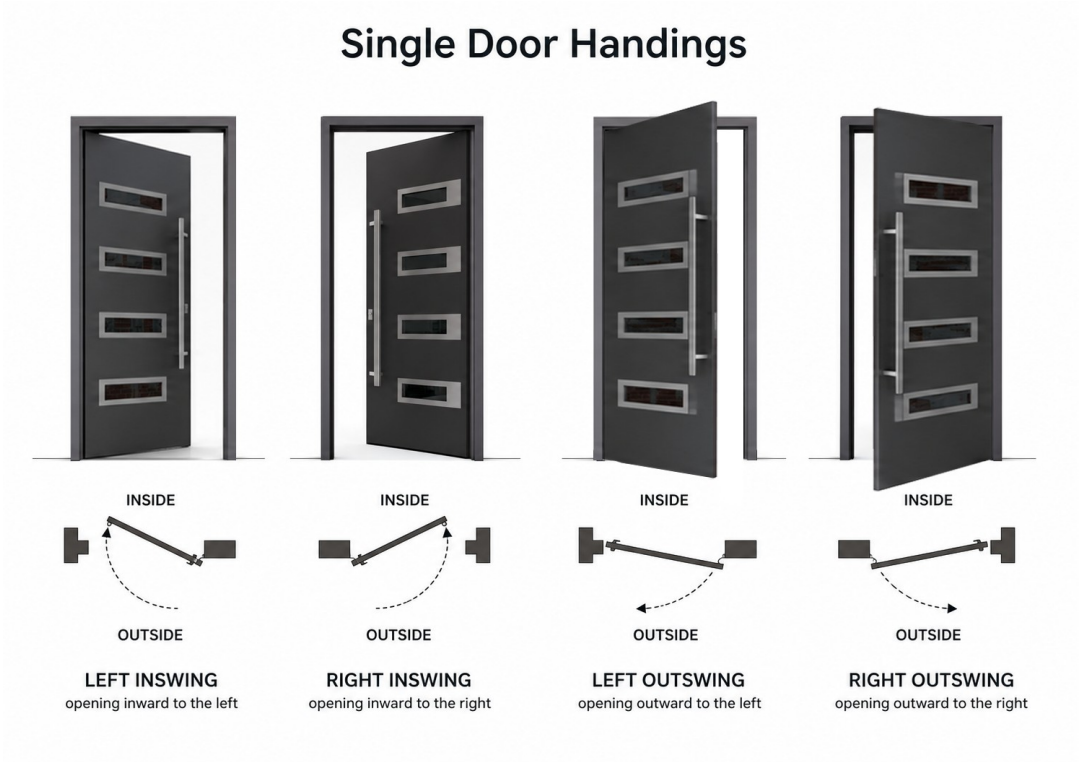
- Carefully remove the packaging, styrofoam and cardboard. Immediately after unpacking, inspect the door unit for completeness and for cosmetic damage, mismatched shades or deformation. If any issue is found, do not install the door — contact the supplier. Claims are far easier to resolve before installation begins.
- Ensure the size, handing and opening direction of the new door match the opening before dismantling the old door.
- The recommended gap between the door frame and the opening is no more than 1-3/16" (30 mm) per side around the entire perimeter.
- We recommend the rough opening be at least 1/2" (13 mm) wider and 1/2" (13 mm) taller than the overall size of the door unit with frame, to leave working room for leveling, plumbing and shimming without forcing the frame during installation.



Checking the door unit after unpacking

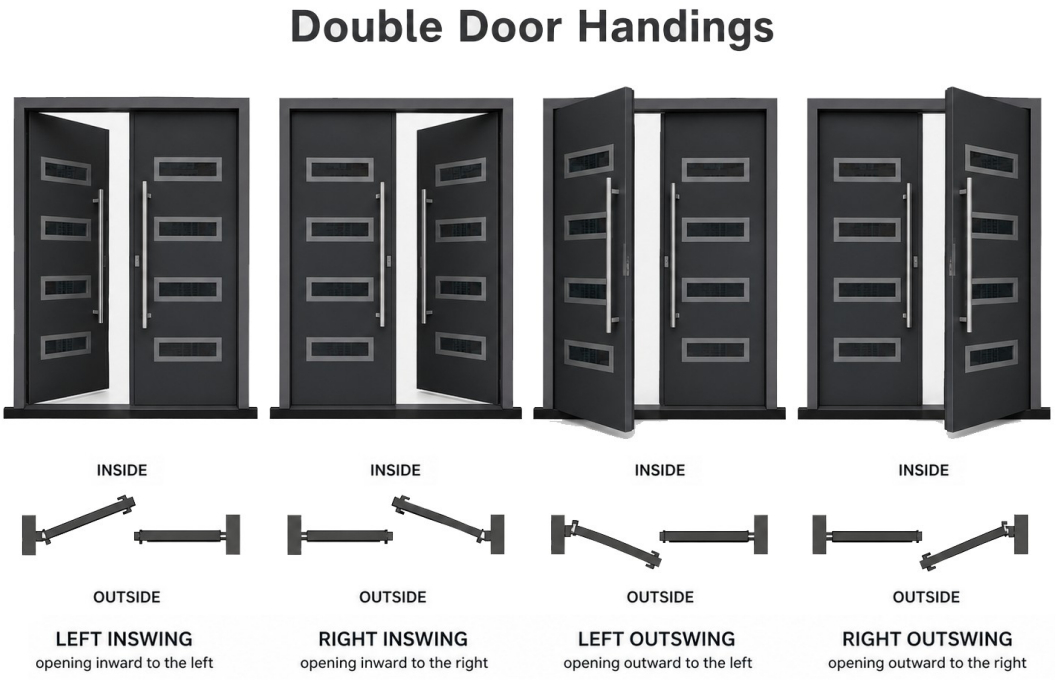
Determining Swing Direction (Handing)

Single doors



Single door handing, viewed from outside — Left/Right Inswing, Left/Right Outswing

Double doors



Double door handing, viewed from outside — Left/Right Inswing, Left/Right Outswing

Orientation tip — find the threshold first

Customers and installers alike sometimes struggle to tell top from bottom in a top-view handing diagram. The threshold is always the lowest part of the frame and is finished in silver (mill or anodized aluminum) — locate it first, orient the diagram so the threshold reads as "down," and the left/right and inswing/outswing designation will follow.

Canopy (overhang) strongly recommended

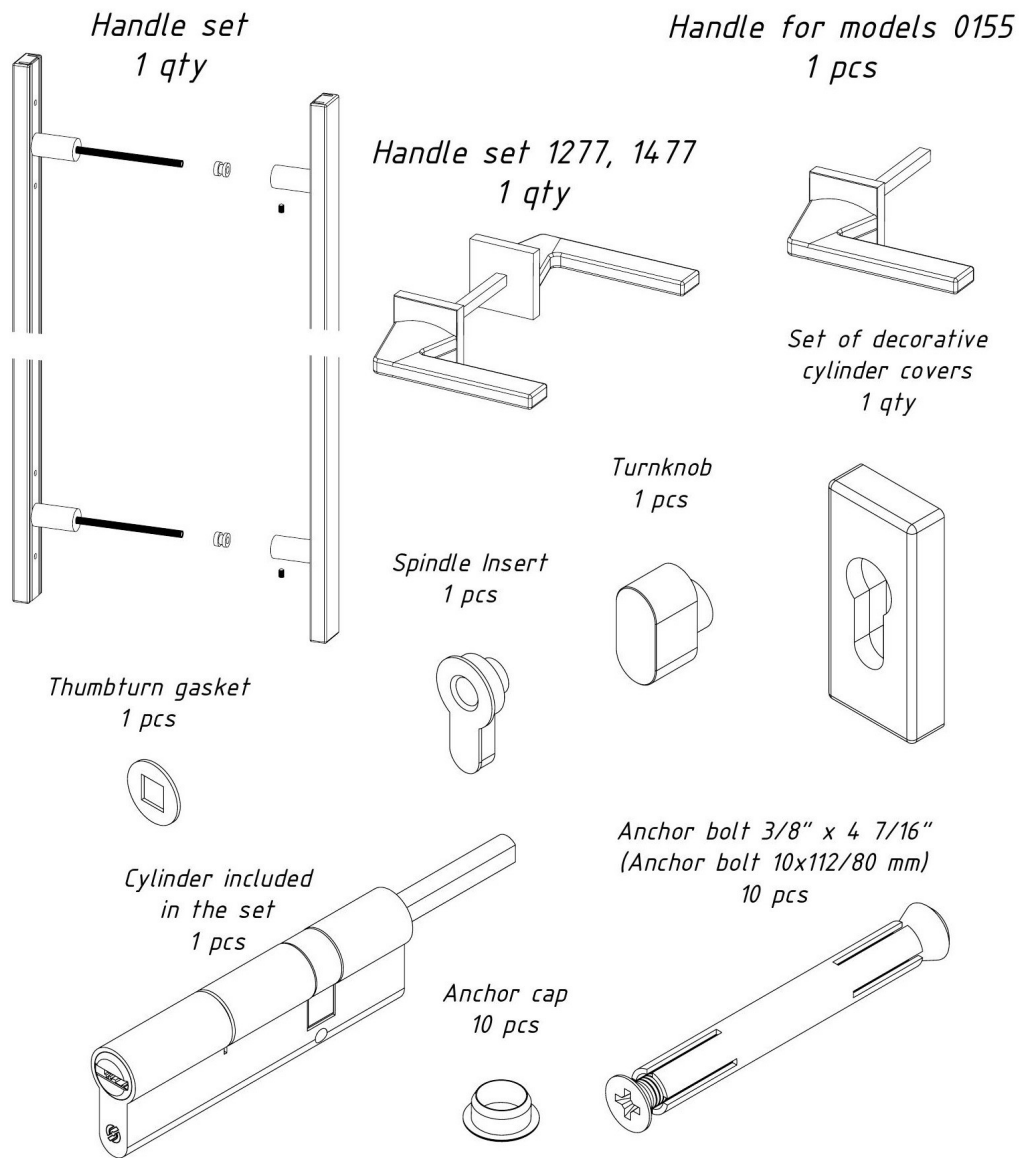
An exterior canopy or roof overhang above the entrance is strongly recommended for every installation. Direct, prolonged exposure to rain, snow and sun accelerates wear of the finish, seals and hardware and can cause water infiltration during driving rain. A canopy protecting the full width of the entrance preserves the appearance and extends the service life of the door unit, and is a condition for maintaining the finish warranty in fully exposed locations.

Package Contents — Accessories Sets

Each door unit ships with an accessories box packed inside the unit. Verify the contents against the applicable list below before installation. The cylinder and keys are packed in this accessories box — not pre-installed in the door — which matters for first opening (see First Opening of the Door, below).

Single doors 80"-96"

Item	Qty
Handle set (barn-style pull handle, through-fixing hardware)	1
Handle set 1277, 1477 (lever handle) — only on models without the long barn pull handle	1
Set of decorative cylinder covers	1
Cylinder (with keys) — packed in the accessories box	1
Spindle insert	1
Turnknob (thumbturn)	1
Thumbturn gasket	1
Anchor bolt 3/8" × 4-7/16" (10×112/80 mm)	10
Anchor cap	10

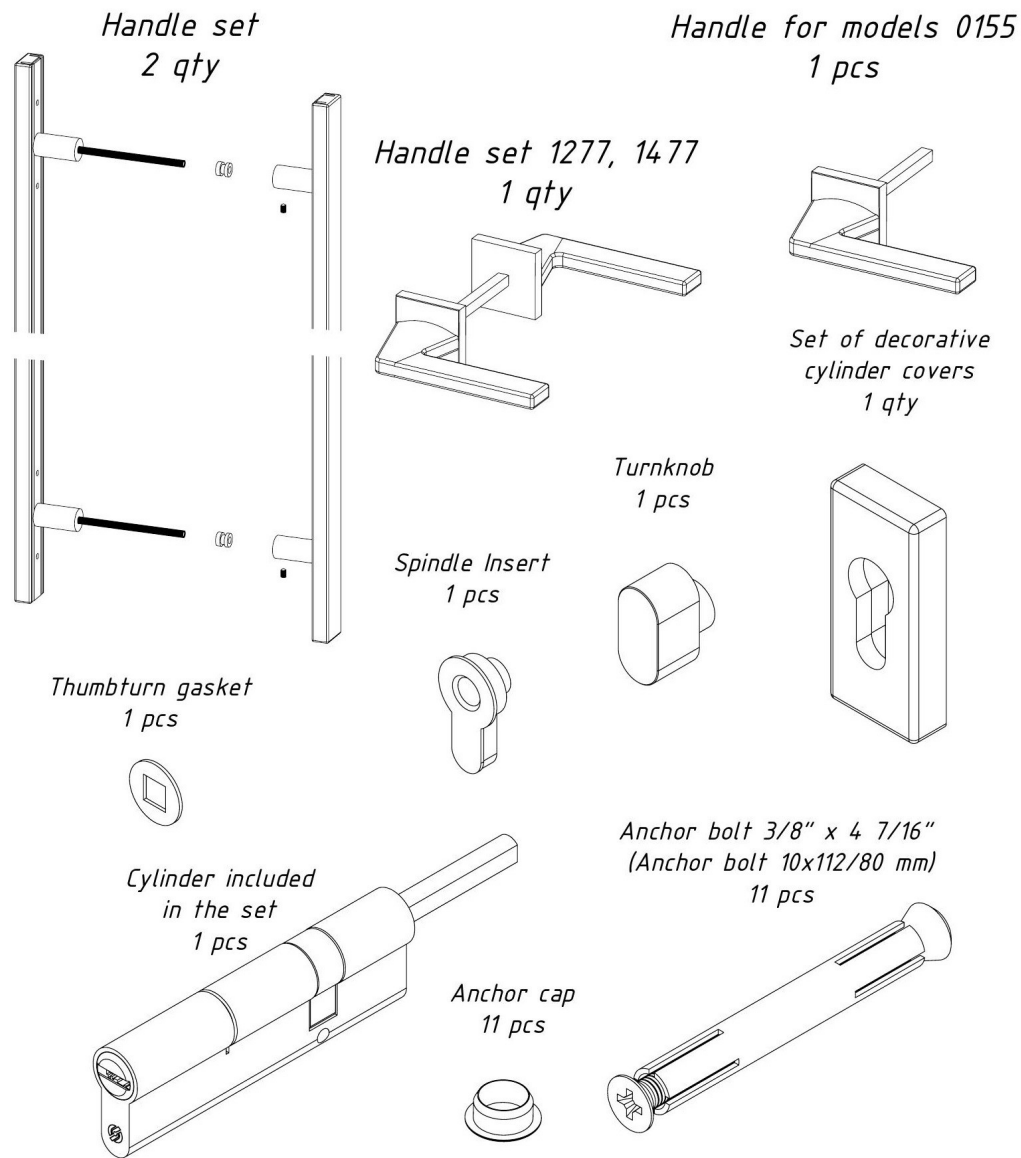


Accessories set for door unit — single doors 80"–96"

Double doors 80"–96"

Item	Qty
Handle set (barn-style pull handle)	2
Handle set for 6777 1277, 1477 (lever handle) — only on models without the long barn pull handle	2
Set of decorative cylinder covers	1
Cylinder (with keys) — packed in the accessories box	1

Item	Qty
Spindle insert	1
Turnknob (thumbturn)	1
Thumbturn gasket	1
Anchor bolt $3/8" \times 4-7/16"$ (10×112/80 mm)	11
Anchor cap	11



Accessories set for door unit — double doors 80"–96"

Which handle does your model include?

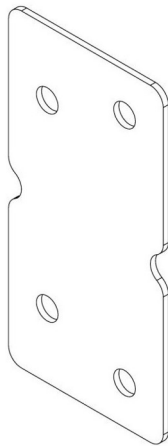
The lever handle set (for models 6777, 1277, 1477) is supplied ONLY on models that do not have the long barn-style pull handle. If your door model is equipped with the full-height barn pull handle, the pull handle set replaces the lever set in the box — the door is then opened from outside by pulling the handle (with the latch in "day" mode) or by key, and no lever is installed. Check your order confirmation to see which handle configuration applies to your model.

Sidelite / transom accessories (if ordered)

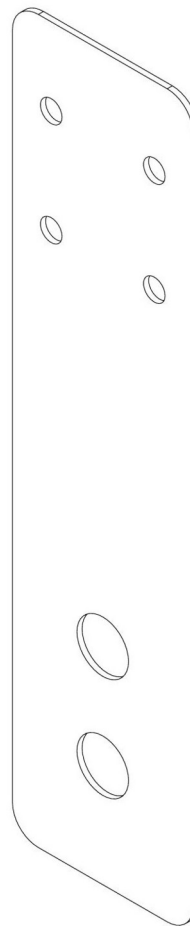
If your entrance includes one or more sidelites (transoms), a separate accessories set is supplied for joining the transom frame to the door frame:

Item	Qty
Transom retaining plate	2
Mounting plate	4
Self-tapping screw #8 × 3/4" (4.2×19 mm)	4
Screw #8 × 1-3/8" (4.2×35 mm)	4

*Transom retaining plate
2 pcs*



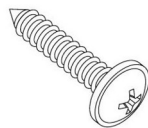
*Mounting plate
4 pcs*



*Self-tapping screw #8 x 3/4"
(Self-tapping screw 4.2x19 mm)
4 pcs*



*Screw #8 x 1 3/8"
(Screw 4.2x35 mm)
4 pcs*



Accessories set for sidelite (transom)

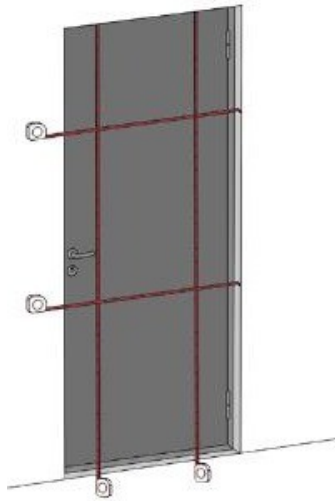
Installing the Door Unit

STEP 1 Prepare and Measure the Opening

Use a tape measure to determine the size of the opening in several locations by width and by height. The opening should be no more than 1-3/16" (30 mm) larger than the installation size of the door frame per side, around the entire perimeter.

ATTENTION

DO NOT dismantle the old door before confirming that the new door is in good order and matches the size of the opening.

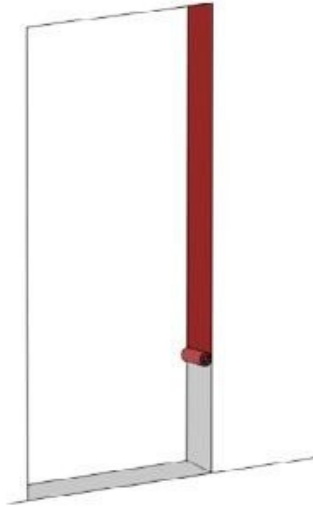


Measuring the door opening at several points

Dismantle the old door. Prepare the opening: level it with a rotary hammer if necessary and clean the installation area of debris. Remove protruding unevenness, fill defective areas with water-resistant putty — sags or damage deeper than 3/8" (10 mm) are not allowed on the opening surface. Degrease oil-contaminated areas and treat crumbling areas with mastic. In winter conditions, also clear snow, ice and frost and warm the surface before installation.

STEP 2 Waterproof the Opening

Waterproof the door opening along the perimeter using waterproofing tape.



Waterproofing the door opening with tape

Check scope of delivery — waterproofing tape

Waterproofing tape may not be included in the standard scope of delivery. Confirm with your order confirmation or sales representative before installation day, and source it locally in advance if it is not supplied, so installation is not delayed.

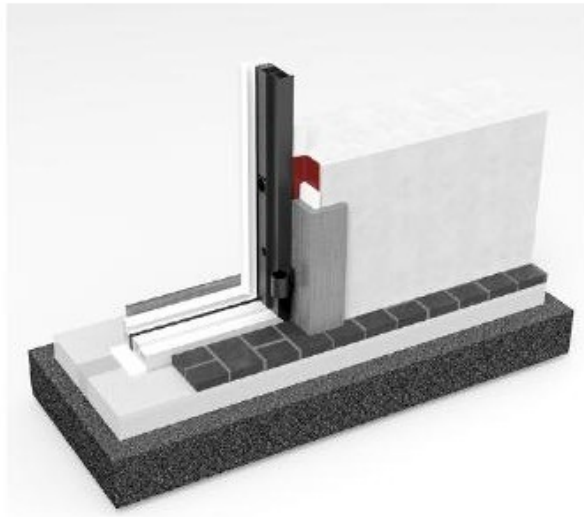
STEP 3 Thermal Break at the Threshold & Sealing Tapes

To prevent cold transfer through the concrete floor screed, cut a gap in the screed under the door line at least 2" (50 mm) wide and as deep as the screed thickness (minimum 4" / 100 mm), and fill it with extruded polystyrene foam (EPS). Concrete conducts heat readily and will otherwise carry cold into the space behind the door unit.

Door unit without trim

- Glue waterproofing tape along the outer contour of the frame on 3 sides, excluding the threshold (hinge side for reverse opening; stop side for right/left-hand opening).
- Glue vapour barrier tape along the inner contour of the frame on 3 sides, excluding the threshold (stop side for reverse opening; hinge side for right/left-hand opening).
- Isolate the threshold from the concrete screed with a rigid polystyrene insulation board (PIB) at least 3/8" (10 mm) thick over the full threshold depth, or with a continuous layer of assembly foam.

After foaming the perimeter of the door unit, fold the waterproofing and vapour barrier tapes over the installation gap and glue them to the wall.



Waterproofing tape on the outer contour (threshold cross-section shown)



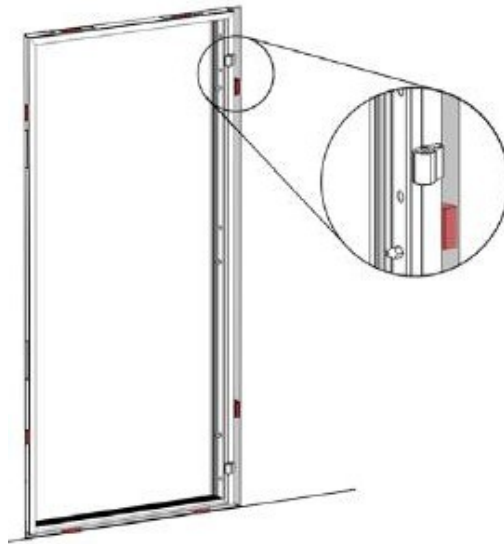
Vapour barrier tape on the inner contour

Door unit with trim

- Glue pre-compressed sealing tape (PCST) on the inner face of the trim (the face adjacent to the wall), along its full contour.
- Glue vapour barrier tape along the inner contour of the frame on 3 sides, excluding the threshold, as above.
- Isolate the threshold from the screed with PIB or a continuous foam layer, as above.

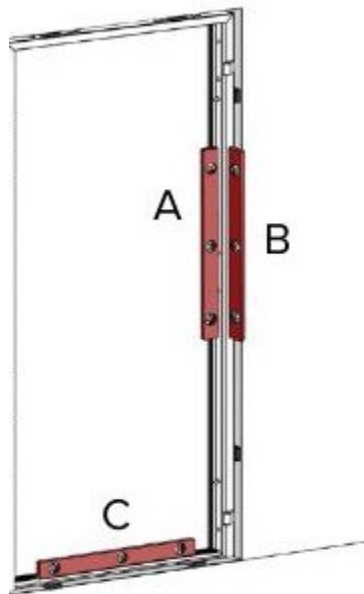
STEP 4 Set, Level and Wedge the Frame

Remove the door leaf from the frame. Place the door frame in the opening on backings (wedges, bars), keeping an equal distance to the opening on both sides. Fix the frame with wedges at the top and bottom — not the middle — so the middle of the frame is not distorted.



Fixing the frame with wedges at top and bottom

Level the frame with a construction level against the hinge side: check vertical alignment on the inner wide plate of the frame (A), tilt on the front face (B), and horizontal alignment on the threshold (C).



Alignment checks — vertical (A), tilt (B), horizontal ©

ATTENTION

If anchor bolts cannot be installed through the frame, installation can be performed with additional mounting plates (lugs) screwed to the frame — see “Remote mounting with plates (lugs)” below.

STEP 5 Anchor the Hinge Side

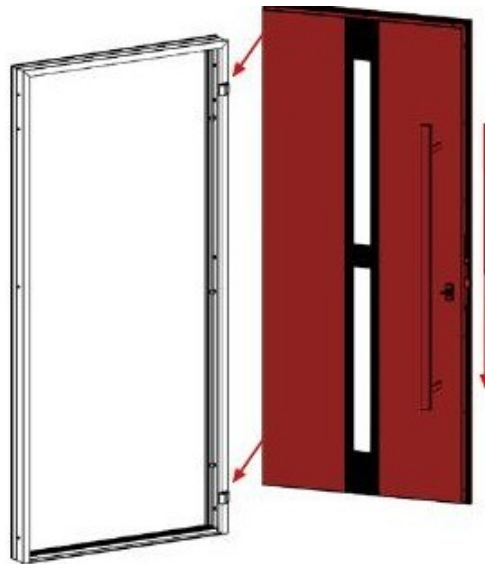
Drill a 3/8" (10 mm) hole, 4-3/4"-5-1/8" (120-130 mm) deep, through the upper mounting hole on the hinge side of the frame. Clean the hole of chips and dust; a cement-sand or adhesive mortar applied to the anchor surface before insertion is recommended. Install the supplied 3/8" × 4-7/16" (10×112/80 mm) anchor with a hammer and impact driver without tightening it fully. Re-check vertical alignment of the hinge side and horizontal alignment of the threshold, then clamp the anchor. Install the bottom anchor on the hinge side the same way.



Drilling through the upper mounting hole on the hinge side

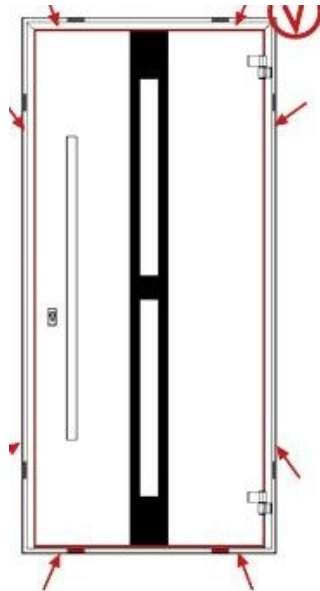
STEP 6 Hang the Leaf and Set the Gaps

Hinge the door leaf. Align the latch side in plane with the frame and check the evenness of the gap between the top of the leaf and the head of the frame. If the gap is uneven, correct it by placing wooden pads under the frame threshold on the smaller-gap side.



Hanging the door leaf on the frame hinges

Drill the remaining wall holes through the frame openings on the left and right, install the anchors and tighten them — but not fully. Close the door and check the vertical and horizontal gaps and that the leaf is in plane with the frame. Only then tighten all anchors completely.



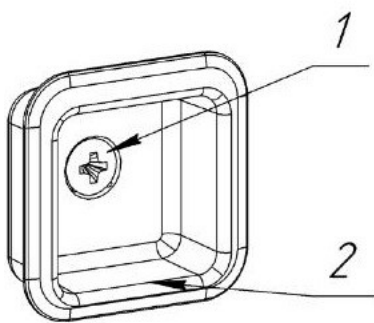
Checking the gaps around the closed leaf before final tightening

STEP 7 Adjust the Leaf

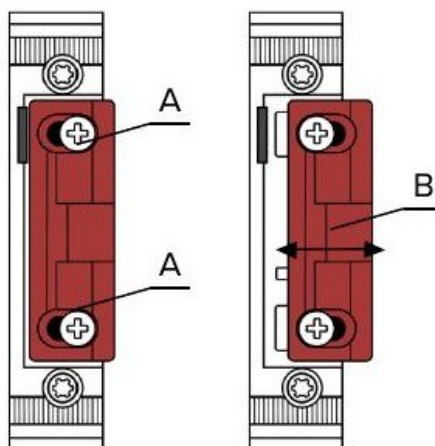
Fine-tune the leaf fit to the frame plane:

- If the door is fitted with a cam adjuster — loosen the retaining screw, turn the cam to one of its four positions, and re-tighten the screw.

- If the door is fitted with a Fuhr electromechanical latch — loosen (do not remove) the two screws on the striker, shift the latch bolt plate in the required direction, re-tighten and test the closure.

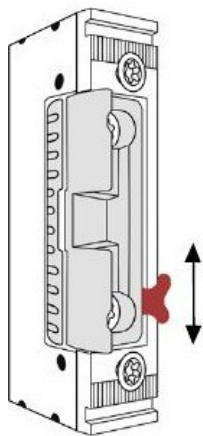


Cam adjuster — screw (1) and cam (2)



Fuhr latch striker adjustment — screws (A), latch plate (B)

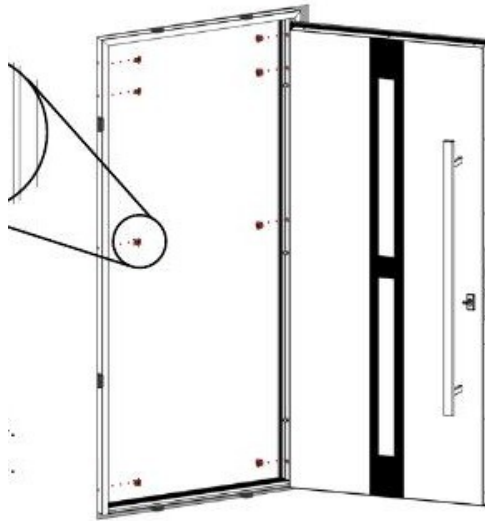
The Fuhr latch has “day” and “night” modes selected by the side switch. In “day” mode the latch bolt can be pressed — required for doors with pull handles. In “night” mode the bolt is fixed, so the door cannot be opened by pulling or pushing the handle; turn the key in the cylinder to the stop to retract the latch and open the door.



“Day” / “night” mode switch on the latch body

STEP 8 Plugs, Foam and Finishing

After final installation and acceptance, cover the fixing openings in the frame with the supplied anchor caps. Blow drilling dust and chips out of the gap, moisten the wall surface with a spray gun, and fill the installation gap with assembly foam. After completing all installation work, remove the protective films from the door.



Covering the frame fixing openings with the supplied caps



Filling the installation gap with assembly foam

Remote mounting with plates (lugs)

Where through-frame anchoring is not possible, use at least 6 mounting plates (lugs) on the vertical profiles of the frame. Fasten each plate to the inner profile of the frame with 4 self-tapping screws #8 × 3/4" (4.2×19 mm) with press washer, and fasten the frame to the opening with 2 anchor bolts per plate.

Mounting the Fittings

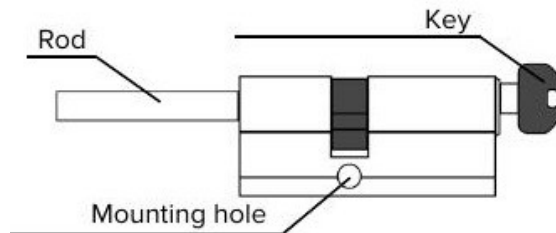
Cylinder — installation and first opening of the door

FIRST OPENING — read before anything else

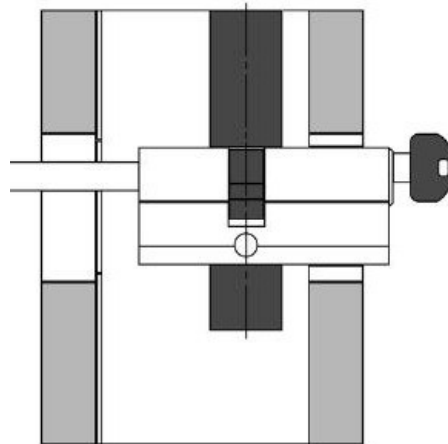
The door ships LOCKED, with the cylinder and keys packed separately in the accessories (hardware) box — the cylinder is NOT pre-installed. You cannot open the door until the cylinder is inserted.

1. Take the cylinder and keys out of the accessories box. 2. Insert the cylinder into the cylinder opening in the door leaf. 3. Rotate the cylinder slightly while inserting to find the position where the cylinder cam synchronizes (engages) with the lock mechanism — you will feel it seat fully flush. 4. Turn the key to retract the deadbolts and open the door.

Once open, align the cylinder mounting hole with the lock axis and secure the cylinder with the supplied screw through the hole in the lock edge plate. Check operation by extending and retracting the deadbolts with the door open before closing it.



Rod cylinder — rod, key and mounting hole



Axial alignment of the cylinder mounting hole with the lock

Decorative cylinder covers

With the cylinder installed in the lock, align the plastic base plate with it and screw the base on with the supplied self-tapping screws. Then pull the cylinder out, slide the decorative cover plate over the base, and re-install the cylinder.

Turnknob (Thumbturn) Installation

The turnknob mounts on the interior face of the door and drives the lock through a connecting rod that passes through the cylinder mechanism. With the cylinder installed and operation confirmed by key, fit the thumbturn gasket over the rod against the door face, then slide the turnknob onto the rod and secure it per the hardware set instructions.

ATTENTION — check the rod length before final fitting

The supplied rod is sized for a range of door thicknesses and may need to be shortened to match the actual thickness of your door leaf before the turnknob is mounted. Dry-fit the rod first; if it protrudes beyond the turnknob hub, mark it, cut it to length with a hacksaw or rod cutter, and deburr the cut end. The turnknob should sit flush against the gasket and turn freely without binding once fitted — do not force an oversized rod.

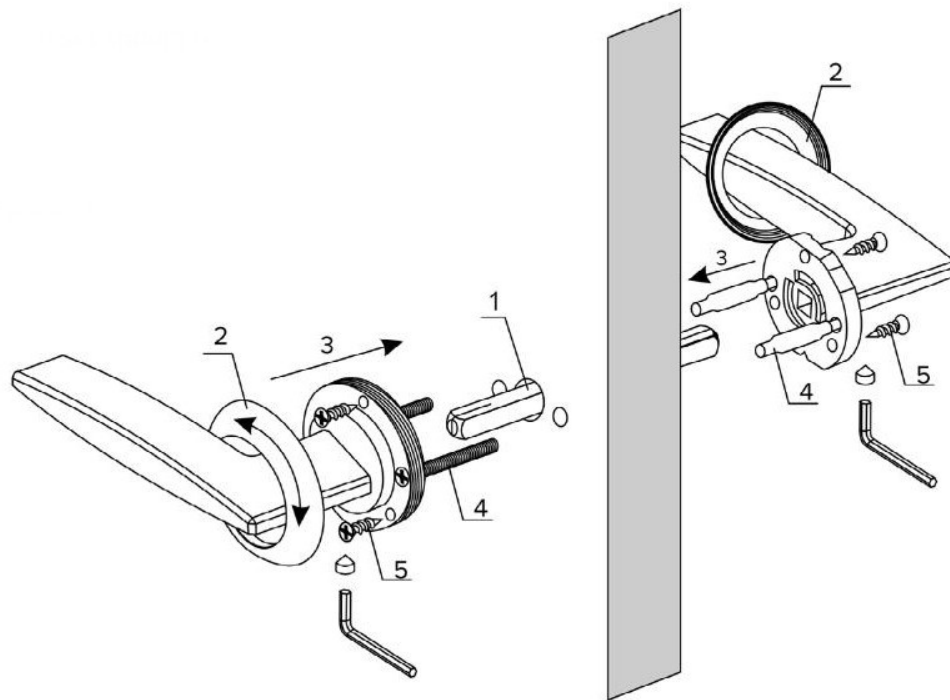
Lever handle (models without the barn pull handle only)

Handle configuration note

The standard lever handle set (series 1277 / 1477 / 0155) is included **ONLY** with door models that are not equipped with the long barn-style pull handle. On barn-handle models, no lever is supplied or installed: the door is operated from outside by the pull handle with the latch in “day” mode, or by key. Skip this subsection if your model has the barn pull handle.

To install the lever handle:

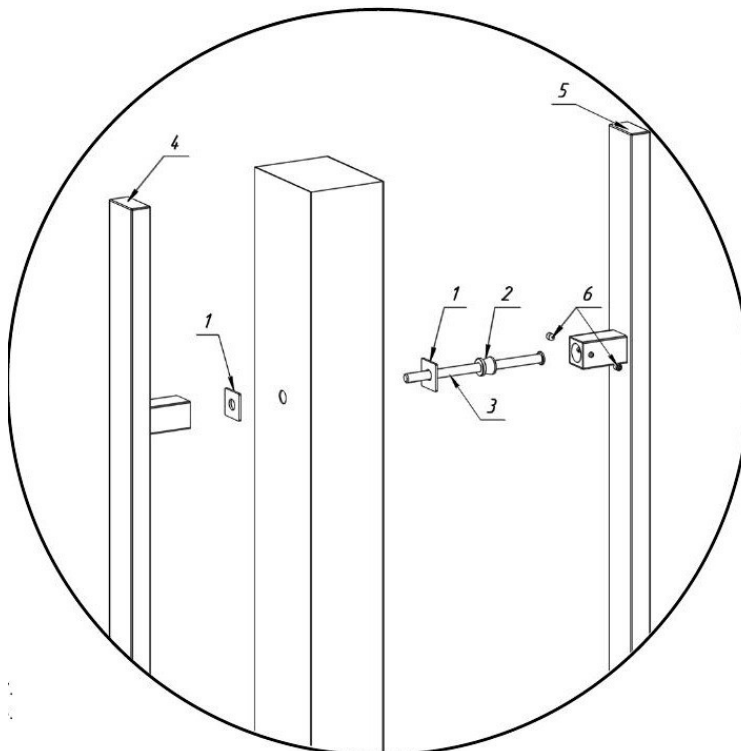
- **1.** Insert the handle square (spindle) from the set into the lock.
- **2.** Remove the handle rose plate from the rose plate base.
- **3.** Mount the handles on the square, tight to the door leaf.
- **4.** Tighten both rose plate bases together with the supplied coupling screws through the holes in the door leaf.
- **5.** Screw on the supplied screws of the handle bases.
- **6.** Snap the handle rose plates back onto the bases.



Installing the lever handle

Barn-style pull handle — double-side fixing (depending on the handle model)

- 1. The exterior handle and square plastic cover plate sit on the outside of the door.
- 2. For each fastening point, drive the screw with its square plastic cover plate and bushing through the mounting hole in the door leaf into the exterior handle. Repeat for the second hole and tighten the screws.
- 3. Place the interior handle on the bushings on the inside of the door and secure it with the set screws.



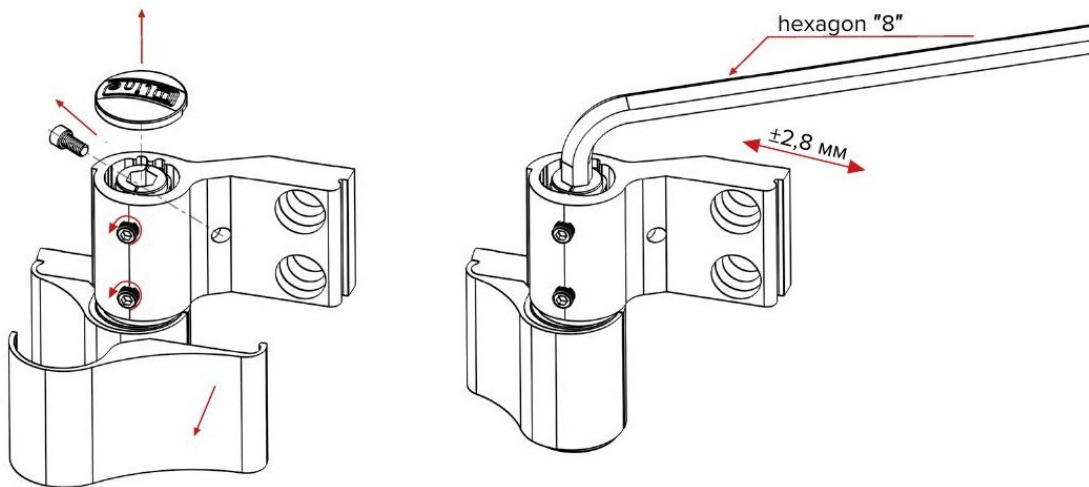
Pull handle — through-hole (double-side) fixing

For single-side fixing models, the same screw + cover plate + bushing set is driven into rivets pre-mounted in the leaf instead of into an opposing exterior handle; the handle then mounts on the bushings and is secured with the set screws.

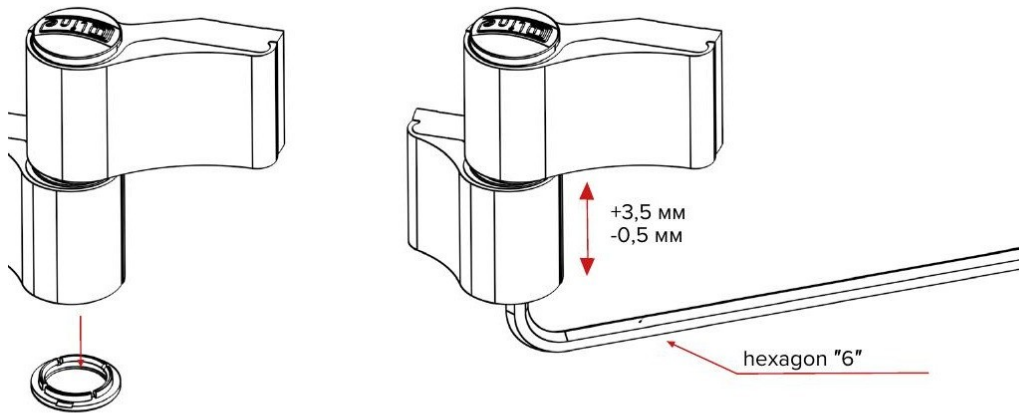
Hinge Adjustment — Two-Piece Hinge

The Hinge adjusts in three axes. All adjustments are made with the door hung.

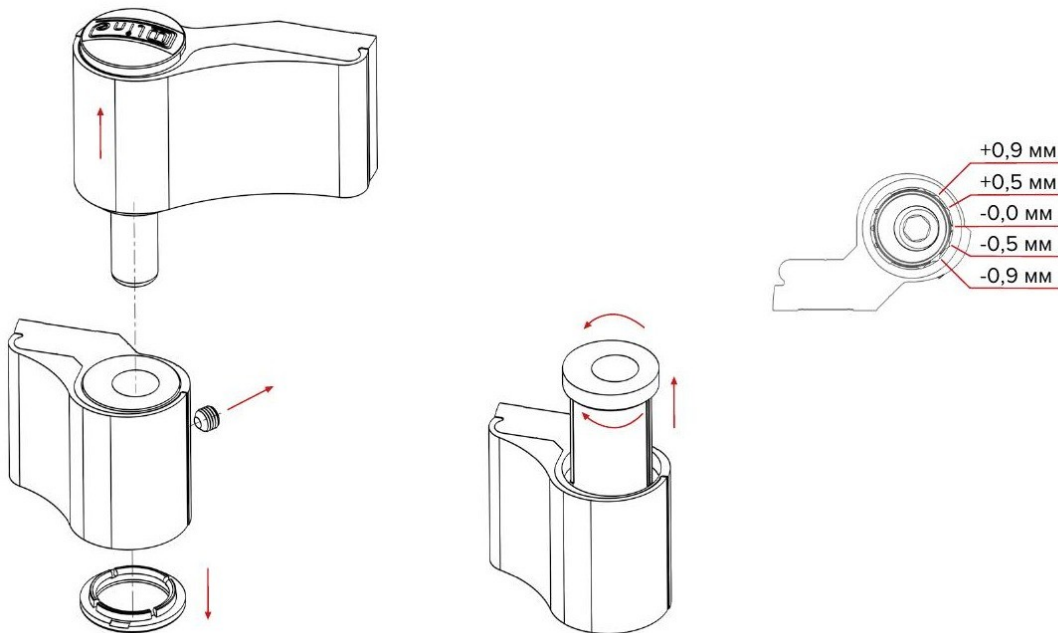
- **Horizontal:** $\pm 7/64"$ (± 2.8 mm). Remove the decorative cap, loosen the clamping screws, and turn the hexagon 8 mm adjuster to move the leaf sideways; re-tighten.
- **Vertical:** $+9/64"$ / $-1/64"$ ($+3.5$ / -0.5 mm). Remove the bottom ring cap and turn the hexagon 6 mm adjuster in the hinge barrel to raise or lower the leaf.
- **Adherence (compression):** $\pm$ up to $3/64"$ (± 0.9 mm) in five detents ($+0.9$ / $+0.5$ / 0 / -0.5 / -0.9 mm). Release the set screw, rotate the eccentric bushing to the required detent, and re-secure.



Horizontal adjustment — hexagon 8, ± 2.8 mm ($\pm 7/64"$)



Vertical adjustment — hexagon 6, +3.5 / -0.5 mm (+9/64" / -1/64")



Adherence adjustment — eccentric bushing detents ± 0.9 mm ($\pm 3/64$ ")

Installing a Transom (Sidelite)

Check the transom immediately after checking the door unit, before mounting. Inspect for cosmetic damage, mismatched shades and deformation; do not mount if any issue is found — contact the supplier. Maintain a 3/8"-1-3/16" (10-30 mm) gap around the transom against the opening. The same procedure applies to any transom position — top, side, or combinations.

- **Orientation** — The mounting side of the transom is the side where the fasteners are screwed on. The outer side has the flush bevel frame; the glazing-bead side faces the premises for right/left-hand doors, while for reverse-opening doors the corner bead faces the premises.

- **Insulate the joint** — For protection against draughts, glue 2 strips of pre-compressed sealing tape (PCST) on the mounting side. The PCST expands up to 4× in thickness (up to 25/32" / 20 mm) after installation.
- **Snap on** — Pre-align the transom with the door unit, leaving the gap on the outside (the side without beads), then snap the fasteners on by applying force on the gap side — by hand, by controlled impact, or with an adjustable clamp along the adjacent surfaces near the fasteners. Fastening operations must only be performed on the side without beads or door frame.
- **Screw together** — Using a driver with an 8 mm socket (outside diameter under 19/32" / 15 mm), screw the door frame and transom together with the supplied self-tapping screws. Reinforce with the transom retaining plate screwed across the joint; repeat at the threshold.

Add-on: Smart Lock with Factory Precut

VDOM exterior aluminum doors can be ordered with a smart lock and a factory precut for it. The precut is a factory-machined mortise in the leaf, dimensioned for the specific smart lock model selected at ordering, so no additional cutting of the aluminum profile is required.

Compatibility and warranty notice

Only smart lock models offered and supplied by VDOM are guaranteed to be fully compatible with the multi-point lock mechanism, cylinder geometry and profile depth of this door. These models are tested with the door's hardware and are covered by the door warranty.

Third-party smart locks may be physically installable but are NOT covered by any compatibility guarantee: differences in backset, spindle drive torque, cylinder length or cam profile can prevent reliable locking or damage the mechanism. VDOM accepts no responsibility for the operation of third-party smart locks or for damage resulting from their installation, and their use may void the hardware warranty. If you plan to use a smart lock, order it — and the matching precut — from VDOM together with the door.

- Order the smart lock and precut together with the door — the precut is model-specific and is not field-retrofittable in the aluminum profile.
- Install the cylinder and confirm normal mechanical key operation first (see First Opening), then install the smart lock modules per the lock manufacturer's manual.
- After commissioning, verify that the deadbolts extend and retract fully under motor drive with the door closed, and that a mechanical key still overrides the lock.

Add-on: Trims — Exterior / Interior Side

Aluminum trim sets are available as an add-on for the exterior side, the interior side, or both, to frame the installed unit and cover the installation gap. Each set includes a head trim (1 pc), and side trims (2 pcs).

- **Dry-fit the head and side trims and cut them to length with a fine-tooth carbide blade.**
- **Seal all field-cut edges with exterior-grade primer or sealer. Apply exterior-rated construction adhesive to the back of each trim.**
- **Install the side and hear trims.**
- **Secure with 15- or 16-gauge galvanized or stainless-steel finish nails driven into solid framing or approved backing.**
- **Fill the nail holes and seal all trim-to-frame, trim-to-wall, corner, and cut joints with exterior-grade paintable sealant.**

With trims — remember the sealing tape

When the unit is installed with exterior trims, glue pre-compressed sealing tape (PCST) on the wall-side face of the trim along its contour before mounting, as described in Step 3 of the installation section.

Add-on: Flat Frame Extension

For walls deeper than the standard frame profile, a flat frame extension is available. It attaches to the frame on the interior side and extends the visible frame plane to the finished wall surface, giving the reveal a finished look without site-made filler strips.

- **1. Measure** — Measure the actual wall depth at the head and both sides of the opening and subtract the frame profile depth to determine the required exposed extension width.
- **2. Account for the insert** — Add the depth of the factory-machined insert edge to the exposed width when determining the overall cut width, and verify the actual engagement depth before cutting.
- **3. Rip to width** — Rip the extension lengthwise with a fine-tooth blade suitable for wood, cutting only from the plain outer edge — never trim the factory-machined insert edge or the casing groove.
- **4. Fit** — Insert the machined edge into the frame groove and confirm it seats fully, square to the frame, with its outer face flush with the finished wall; then fix per the extension's drilling template and finish with interior trim if ordered.

Troubleshooting

Symptom	Likely cause	Fix
Cannot open the door for the first time after delivery	The cylinder is not installed — it ships packed in the accessories box, and the door is locked	Take the cylinder and keys from the hardware box, insert the cylinder into the opening in the leaf, rotate it slightly until the cam synchronizes with the lock and it seats flush, then turn the key to retract the deadbolts and open the door
Key turns but deadbolts do not move	Cylinder cam not engaged with the lock gear (cylinder inserted in a wrong position)	Pull the cylinder out slightly, rotate it a few degrees and re-seat it until the cam engages; secure with the fixing screw only after operation is confirmed
Cylinder fixing screw will not thread in	Cylinder mounting hole not aligned with the lock axis	Align the mounting hole in the cylinder body exactly with the screw channel in the lock edge plate before driving the screw
Door cannot be opened by pulling the handle	Latch is in “night” mode (latch bolt fixed) — normal for security	Turn the key in the cylinder to the stop to retract the latch, or move the latch switch to “day” mode for pull-handle operation

Symptom	Likely cause	Fix
Leaf rubs the frame at the top or latch side	Frame racked during anchoring, or hinges need adjustment	Loosen the anchors, re-check A/B/C alignment with a level, re-tighten; then use the Wala MX horizontal ($\pm 7/64"$) and vertical ($+9/64"/-1/64"$) adjustments
Uneven gap between leaf top and frame head	Threshold not level — one side sits lower	Place wooden pads under the frame threshold on the smaller-gap side, as in Step 6
Draught or whistling around the closed leaf	Insufficient seal compression	Increase compression with the hinge adherence adjustment ($\pm 3/64"$) and, if fitted, the cam adjuster positions; verify the perimeter foam and tapes are continuous
Water at the threshold during driving rain	No canopy over the entrance, or threshold not isolated/sealed	Install a canopy over the full entrance width (strongly recommended); verify the threshold EPS/foam layer and exterior waterproofing tape are continuous
Condensation on the interior frame surface in winter	Cold bridge — threshold or perimeter not thermally isolated	Verify the EPS gap under the threshold and the continuous foam fill; check that the vapour barrier tape is glued to the wall on the interior side
Smart lock does not drive the deadbolts fully	Third-party lock with incompatible spindle torque, backset or cylinder cam	Only VDOM-supplied smart lock models are guaranteed compatible; remove the third-party unit, restore mechanical operation, and contact VDOM for a tested model